

Notice of Allowability

Application No.

09/653,925

Examiner

Nitin Parekh

Applicant(s)

KELKAR ET AL

Art Unit

2811

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11-08-04.
2. ☒ The allowed claim(s) is/are 1, 3, 5-7, 15, 17, 19-22, 25, 26 and 29-34.
3. ☒ The drawings filed on 01 September 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Nitin Parekh
Nitin Parekh
Primary Examiner
Technology Center 2800

DETAILED ACTION

Allowable Subject Matter

1. Claims 1, 3, 5-7, 15, 17, 19-22, 25, 26 and 29-34 are allowed.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
 - A. Insert — "wherein said air gap has a height in the range of between about 10-500 microns" — at the end of claim 1, line 15.
 - B. Cancel claims 2 and 16.
 - C. Insert — "wherein said air gap has a height in the range of between about 10-500 microns" — at the end of claim 15, line 16.

Authorization for this examiner's amendment was given in a telephone interview with Desmond Gean on 01-14-05.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

The references of record do not teach either singularly or in combination at least the limitations "a single-layer solid flexible dielectric circuit film having a thickness of 10,000 to 200,000 Angstroms, a top surface, a bottom surface and a routing conductor, the flexible circuit film having at least one outer landing formed on the top surface and at least one inner landing formed on the bottom surface such that the landings on the top and bottom surfaces are fully supported by the circuit film, wherein the outer landing is laterally offset from the inner landing and the two landings are connected via the routing conductor, which extends laterally within the single-layer solid flexible dielectric circuit film" and "wherein said air gap is has a height in the range of 10-500 microns" in an integrated circuit (IC) package having at least one raised interconnect between the IC die and the flexible circuit film having an air gap there-between.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin Parekh whose telephone number is 571-272-1663. The examiner can normally be reached on 09:00AM-05:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on 571-272-1732. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

NP

12-29-04



NITIN PAREKH

PRIMARY EXAMINER

TECHNOLOGY CENTER 2800